

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 16, 2005

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJECT: Activity Report for the Week Ending December 16, 2005

DNFSB Staff Activity: Technical staff members E. Elliot, S. Stokes, J. Troan, R. Zavadoski, and L. Zull were on-site reviewing various activities and projects.

Tank Farm: CH2M Hill engineering is evaluating if damage due to freezing could have occurred to waste transfer pipes. The evaluation began after the site rep questioned the adequacy of the freeze protection. The ground cover for sections of pipe had been removed during work activities performed last summer. These pipes are not heat traced because they are usually buried below the frostline. The pipes left uncovered include supernate and slurry transfer lines for the AW and SY tank farms. Transfers through these pipes are prohibited until the engineering evaluations and the required corrective actions are completed.

K Basins: The K Basin Closure Project declared a positive unreviewed safety question (USQ) for possible hydrogen accumulation in sludge containers. The concern is that partially filled containers were not monitored for hydrogen accumulation (see site rep activity report dated 11/25/05). Compensatory measures have been implemented to ensure that any significant quantity of hydrogen is released before the lower flammability limit is reached.

The site rep attended portions of the 60% sludge corrosion (oxidation) design review. The meetings were well attended and included personnel from British Nuclear Group, Fluor Hanford, and Richland Operations Office. The design review did not consider the latest set of safety-related controls being developed in ongoing control decision meetings.

Plutonium Finishing Plant: The project generated an occurrence report for recurring criticality non-conformance conditions. The non-conformance that triggered the report was found last week and dealt with incomplete information on labels for fissile material containers (see site rep activity report dated 12/9/05).

Waste Treatment and Immobilization Plant (WTP): An assessment of work control practices was completed this week by an integrated assessment team from Washington Safety Management Solutions, DOE, and Bechtel National, Inc. The assessment is being conducted as part of the implementation plan for DNFSB Recommendation 2004-1, commitment 23. The review identified eight potential deviations from established policies, procedures, and/or performance objectives. One of the deviations noted is that root cause analyses are routinely not completed within 21 days as specified in WTP procedures. The results also include 13 recommendations, including documenting the work status of delayed or suspended work, improving the management assessments program, and formalizing the lessons learned and feedback for work packages.

cc: Board Members